

### AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Canceled).
2. (Canceled).
3. (Canceled).
4. (Currently Amended) Method, according to claim ~~[[3]]~~ 10, wherein said time interval comprises a time interval that the Base Station connected with the mobile unit has yielded.
5. (Currently Amended) Method, according to claim ~~[[3]]~~ 10, further comprising:  
at each Base Station receiving the ECHO response, measuring the quality of the ECHO response and reporting the quality measurements to a Switch connected to the Base Stations.
6. (Currently Amended) Method, according to claim ~~[[3]]~~ 10, further comprising:  
measuring the quality of each ECHO response by a technique selected from the group consisting of energy level measurement, signal-to-noise ratio (SNR) measurement, packet loss ratio, and bit error rate measurement (BER).
7. (Currently Amended) Method, according to claim ~~[[3]]~~ 10, wherein:  
the PING command comprises data fields selected from the group consisting of a device address for the mobile unit, an identifier for the mobile unit, a message length, and data; and  
the ECHO response comprises data fields selected from the group consisting of an identifier for the mobile unit, a message length, and data.

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8. **(Currently Amended)** Method, according to claim ~~[[3]]~~ 10, further comprising:
- at each Base Station, maintaining information about connections between mobile units and neighboring Base Stations, wherein the information is selected from the group consisting of connection number, handset ID, Base Station ID, handoff status and handset detection status.
9. **(Original)** Method, according to claim 8, wherein the handset detection status information comprises information selected from the group consisting of number of successful PING, time of last successful PING, quality measurements for successful PINGs.
10. **(Currently amended)** In a wireless communication system comprising a Base Station connected with a mobile unit, a method of detecting a mobile unit by at least one Base Station which is waiting for the mobile unit to enter its coverage area, comprising:
- transferring to the at least one Base Station waiting for the mobile unit to enter its coverage area timing information identifying a time interval;
- from the at least one Base Station waiting for the mobile unit to enter its coverage area, sending at least one PING command to the mobile unit during said time interval; and
- at the Base Station waiting for the mobile unit to enter its coverage area, receiving at least one ECHO reply from the mobile unit,
- ~~Method, according to claim 3,~~ wherein the mobile unit is a device selected from the group consisting of:
- telephone handset, standard cordless telephone handset, cellular telephone handset, personal data device, personal digital assistant (PDA), computer, laptop

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computer, e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

11. **(Currently Amended)** Method, according to claim [[3]] 10, further comprising:

providing communication links between the Base Stations, wherein the communication links between the Base Stations are selected from the group consisting of RF links and land lines; and

transferring connection status information and rough synchronization information between the Base Stations over the communications links.

12. **(Currently Amended)** Method, according to claim [[3]] 10, wherein:

the wireless communication system comprises a wireless private branch exchange (WPBX) handling calls from mobile units comprising handsets.

13. **(Canceled).**

14. **(Currently amended)** Method, according to claim [[13]] 19, further comprising:

at each Base Station receiving the ECHO response, measuring the quality of the ECHO response and reporting the quality measurements to a Switch connected to the Base Stations.

15. **(Currently amended)** Method, according to claim [[13]] 19, further comprising:

measuring the quality of each ECHO response by a technique selected from the group consisting of energy level measurement, signal-to-noise ratio (SNR) measurement, packet loss ratio, and bit error rate measurement (BER).

16. **(Currently amended)** Method, according to claim [[13]] 19, wherein:

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the PING command comprises data fields selected from the group consisting of a device address for the mobile unit, an identifier for the mobile unit, a message length, and data; and

the ECHO response comprises data fields selected from the group consisting of an identifier for the mobile unit, a message length, and data.

17. **(Currently amended)** Method, according to claim [[13]] 19, further comprising:

at each Base Station, maintaining information about connections between mobile units and neighboring Base Stations, wherein the information is selected from the group consisting of connection number, handset ID, Base Station ID, handoff status and handset detection status.

18. **(Previously presented)** Method, according to claim 17, wherein the handset detection status information comprises information selected from the group consisting of number of successful PING, time of last successful PING, quality measurements for successful PINGs.

19. **(Currently Amended)** In a wireless communication system comprising a Base Station connected with a mobile unit, a method of detecting a mobile unit by at least one Base Station which is waiting for the mobile unit to enter its coverage area, comprising:

from the Base Station connected with the mobile unit, sending at least one PING command to the mobile unit during a time interval;

transferring to the Base Station waiting for the mobile unit to enter its coverage area timing information identifying said time interval; and

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based on said timing information, at the Base Station waiting for the mobile unit to enter its coverage area, receiving an ECHO reply from the mobile unit in response to said PING command,

~~Method, according to claim 13,~~ wherein the mobile unit is a device selected from the group consisting of:

telephone handset, standard cordless telephone handset, cellular telephone handset, personal data device, personal digital assistant (PDA), computer, laptop computer, e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

20. **(Currently amended)** Method, according to claim ~~[[13]]~~ 19, further comprising:

providing communication links between the Base Stations, wherein the communication links between the Base Stations are selected from the group consisting of RF links and land lines; and

transferring connection status information and rough synchronization information between the Base Stations over the communications links.

21. **(Currently amended)** Method, according to claim ~~[[13]]~~ 19, wherein:

the wireless communication system comprises a wireless private branch exchange (WPBX) handling calls from mobile units comprising handsets.

22. **(Canceled).**

23. **(Canceled).**

24. **(Currently amended)** Method, according to claim ~~[[13]]~~ 19, wherein the at least one Base Station waiting for the mobile unit to enter its coverage area starts to monitor said

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ECHO reply when an initial connection of the mobile unit to any one of the Base Stations is created.

25. **(Currently amended)** Method, according to claim [[3]] 10, wherein sending said at least one PING command comprises periodically sending a plurality of PING commands to the mobile unit.
26. **(Currently amended)** Method, according to claim [[13]] 19, wherein sending said at least one PING command comprises periodically sending a plurality of said PING commands to the mobile unit.
27. **(Canceled).**
28. **(Currently amended)** The wireless communication system of claim [[27]] 33 comprising a switch connected to said first and second base stations, wherein said second base station is able to measure the quality of the ECHO response, and to report the quality measurements to said switch.
29. **(Previously presented)** The wireless communication system of claim 28, wherein said second base station is able to measure the quality of the ECHO response by a technique selected from the group consisting of energy level measurement, signal-to-noise ratio (SNR) measurement, packet loss ratio, and bit error rate measurement (BER).
30. **(Currently amended)** The wireless communication system of claim [[27]] 33, wherein said PING command comprises data fields selected from the group consisting of a device address for the mobile unit, an identifier for the mobile unit, a message length, and data; and wherein the ECHO response comprises data fields selected from the group consisting of an identifier for the mobile unit, a message length, and data.

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31. **(Currently amended)** The wireless communication system of claim ~~[[27]]~~ 33, wherein each one of said first and second base stations is able to maintain information about connections between mobile units and neighboring Base Stations, wherein the information is selected from the group consisting of connection number, handset ID, Base Station ID, handoff status and handset detection status.

32. **(Previously presented)** The wireless communication system of claim 31, wherein the handset detection status information comprises information selected from the group consisting of number of successful PING, time of last successful PING, quality measurements for successful PINGs.

33. **(Currently amended)** A wireless communication system comprising:

a first base station able to communicate with a mobile unit; and

a second base station waiting for the mobile unit to enter its coverage area, said second base station able to receive timing information identifying a timing of a time interval yielded by said first base station, to send at least one PING command to said mobile unit during said time interval, and to receive at least one ECHO reply from said mobile unit.

~~The wireless communication system of claim 27,~~ wherein the mobile unit is a device selected from the group consisting of a telephone handset, a standard cordless telephone handset, a cellular telephone handset, a personal data device, a personal digital assistant (PDA), a computer, a laptop computer, an e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

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34. **(Currently amended)** The wireless communication system of claim [[27]] 33 comprising one or more communication links connecting said first and second base stations, said first and second base stations are able to transfer connection status information and rough synchronization information over said communications links, wherein the communication links are selected from the group consisting of RF links and land lines.
35. **(Canceled).**
36. **(Currently amended)** The wireless communication system of claim [[35]] 41 comprising a switch connected to said first and second base stations, wherein said second base station is able to measure the quality of the ECHO response, and to report the quality measurements to said switch.
37. **(Previously presented)** The wireless communication system of claim 36, wherein said second base station is able to measure the quality of the ECHO response by a technique selected from the group consisting of energy level measurement, signal-to-noise ratio (SNR) measurement, packet loss ratio, and bit error rate measurement (BER).
38. **(Currently amended)** The wireless communication system of claim [[35]] 41, wherein said PING command comprises data fields selected from the group consisting of a device address for the mobile unit, an identifier for the mobile unit, a message length, and data; and wherein the ECHO response comprises data fields selected from the group consisting of an identifier for the mobile unit, a message length, and data.
39. **(Currently amended)** The wireless communication system of claim [[35]] 41, wherein each one of said first and second base stations is able to maintain information about connections between mobile units and neighboring Base Stations, wherein the

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information is selected from the group consisting of connection number, handset ID, Base Station ID, handoff status and handset detection status.

40. (Previously presented) The wireless communication system of claim 39, wherein the handset detection status information comprises information selected from the group consisting of number of successful PING, time of last successful PING, quality measurements for successful PINGs.

41. (Currently amended) A wireless communication system comprising:

a first base station connected to a mobile unit, and able to send at least one PING command to the mobile unit during a time interval; and

a second base station waiting for the mobile unit to enter its coverage area, said second base station able to receive timing information identifying said time interval, and based on said timing information, to receive from the mobile unit an ECHO reply in response to said PING command.

~~The wireless communication system of claim 35,~~ wherein the mobile unit is a device selected from the group consisting of a telephone handset, a standard cordless telephone handset, a cellular telephone handset, a personal data device, a personal digital assistant (PDA), a computer, a laptop computer, an e-mail server, a device utilizing point-to-point protocol (PPP) to the Internet via a central remote access server, a headset, a personal server, a wearable computer, a wireless camera, and a mobile music player.

42. (Currently amended) The wireless communication system of claim ~~[[35]]~~ 41 comprising one or more communication links connecting said first and second base stations, said first and second base stations are able to transfer connection status

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information and rough synchronization information over said communications links,  
wherein the communication links are selected from the group consisting of RF links and  
land lines.

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